



INVESTIGATOR'S ANNUAL REPORT

United States Department of the Interior

National Park Service

All or some of the information you provide may become available to the public.

OMB # (1024-0236)
Exp. Date (11/30/2010)
Form No. (10-226)

Reporting Year: 2008	Park: Sitka NHP	Select the type of permit this report addresses: Scientific Study
Principal Investigator: David Tallmon		Office Phone: 907-796-6330
Mailing Address: UAS Biology and UAF-JCSFOS 11120 Glacier Hwy Juneau, AK 99801 Juneau, AK 99801		Office Fax: 907-796-6447
		Office Email: david.tallmon@uas.alaska.edu
Additional investigator or key field assistants(first name, last name, office phone, office email)		
Name: David Tallmon Phone: 907-796-6330 Email: david.tallmon@uas.alaska.edu		
Name: Andrew Whiteley Phone: 907-796-6442 Email: andrew.whiteley@uas.alaska.edu		
Name: Luke Neraas Phone: 907-796-6330 Email: l.neraas@uaf.edu		

Study Title (maximum 300 characters): Contaminants Assessment of Intertidal Resources in Southeast Alaska National Parks			
Park-assigned Study or Activity #: SITK-01007	Park-assigned Permit #: SITK-2007-SCI-0001	Permit Start Date: Jun 01, 2007	Permit Expiration Date: Sep 30, 2008
Scientific Study Starting Date: Jun 01, 2007		Estimated Scientific Study Ending Date: Sep 30, 2008	
For either a Scientific Study or a Science Education Activity, the status is: Continuing		For a Scientific Study that is completed, please check each of the following that applies: <input type="checkbox"/> A final report has been provided to the park or will be provided to the park within the next two years <input type="checkbox"/> Copies of field notes, data files, photos, or other study records, as agreed, have been provided to the park <input type="checkbox"/> All collected and retained specimens have been cataloged into the NPS catalog system and NPS has processed loan agreements as needed	
Activity Type: Inventory			
Subject/Discipline: Contaminants / Hazardous Materials			

Purpose of Scientific Study or Science Education Activity during the reporting year (maximum 4000 characters): Seemingly pristine and protected areas can be negatively impacted by contaminants from extremely distant, as well as nearby, sources. Contaminants can take many forms and threaten different components and trophic levels of ecosystems. In Southeast Alaska, recent research has shown that contaminants from a wide range of types and sources are a serious concern, even though the Gulf of Alaska is among the most pristine marine ecosystems yet tested for contaminants (Wright et al. 2000). The Southeast Alaska Network (SEAN) faces both local and global contamination threats (Engstrom and Swain 1997). An assessment will be made regarding the status of contamination levels of intertidal resources for the coastal parks of SEAN Inventory and Monitoring program. Intertidal mussels will be collected from a number of sites to assess the levels of persistent organic pollutants (POP's), polycyclic aromatic hydrocarbons (PAH's) and metals (e.g., Cd, Hg, etc.). These levels will be considered and interpreted relative to other sites within parks, among parks, and with similar state-wide (e.g., Prince William Sound) and national sampling frameworks (e.g., national Mussel Watch Program). The assessment will also help identify the source of contamination, quantify baseline levels in the event of future
--

catastrophic events, such as an oil spill, and serve as the foundation for recommendations regarding whether the intertidal resources are healthy or approaching impairment and in need of further research or management action.

Findings and status of Scientific Study or accomplishments of Science Education Activity during the reporting year (maximum 4000 characters):

Glacier Bay National Park and Preserve (GLBA), Klondike Gold Rush National Historic Park (SITK), and Sitka National Historic Park (SITK) form the network of US National Parks in southeast Alaska (SEAN). Intertidal bay mussel samples were collected from each of the parks and then analyzed to determine levels of several metals, polyaromatic hydrocarbons (PAH), persistent organic pollutants (POP), and several metals along the coast in and near each of the SEAN parks. Overall, contamination levels in and around SEAN parks are low and the patterns of contamination suggest most contaminated sites are impacted by local, rather than regional or global sources. Crescent Harbor has some of the highest levels of contaminants in and around SEAN.

For Scientific Studies (not Science Education Activities), were any specimens collected and removed from the park but not destroyed during analysis?

Yes

Funding specifically used in this park this reporting year that was provided by NPS (enter dollar amount):

\$15,000.00

Funding specifically used in this park this reporting year that was provided by all other sources (enter dollar amount):

\$0.00

List any other U.S. Government Agencies supporting this study or activity and the funding each provided this reporting year:

For Scientific Studies (not Science Education Activities), were any specimens collected and removed from the park but not destroyed during analysis?

Yes

If "Yes", identify where the specimens currently are stored:

Specimens were sent to labs for contaminant analyses. These samples were consumed in the process of contaminant analysis and are no longer available.

Paperwork Reduction Act Statement: A federal agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. Public reporting for this collection of information form is estimated to average 1.38 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the forms. Direct comments regarding this burden estimate or any aspect of this form to Dr. John G. Dennis, Natural Resources (3130 MIB), National Park Service, 1849 C Street, N.W., Washington, DC 20240.

Privacy Act Notice: Scientific research, education and collecting activities within units of the National Park System that may impact parks invoke a permitting and reporting requirement per regulations at 36 CFR 1.6 (Permits), 36 CFR 2.1 (Preservation of Natural, Cultural and Archeological Resources), and 36 CFR 2.5 (Research Specimens). The National Park Service collects information about permit applicants and permittees to administer and document research, collecting, and reporting activities within parks. The information disclosed on this form is required and may result in denial of permit applications if not provided.